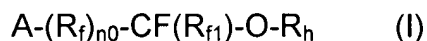


## I. AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Process for obtaining hydrofluoroethers of formula (I):



wherein:

$n_0$  is zero or 1;

$R_f$  is a bivalent radical:

$C_1$ - $C_{20}$ , ~~preferably  $C_2$ - $C_{12}$~~ , linear or branched (per)fluoroalkylene, optionally containing one or more oxygen atoms;

$-CFW'O-(R_{f2})-CFW-$ , wherein W and W', equal or different, are F,  $CF_3$ ;  $R_{f2}$  is a (per)fluoropolyoxyalkylene containing one or more of the following units, statistically distributed along the chain,  $(C_3F_6O)$ ;  $(CFWO)$  wherein W is as above;  $(C_2F_4O)$ ,  $(CF_2(CF_2)_zCF_2)$  wherein z is an integer equal to 1 or 2;  $(CH_2CF_2CF_2)$ ;

$R_{f1}$  is F or a  $C_1$ - $C_{10}$  linear or branched (per)fluoroalkyl or (per)fluorooxyalkyl radical;

$R_h$  is a  $C_1$ - $C_{20}$ , ~~preferably  $C_4$ - $C_{10}$~~  linear, branched when possible, saturated or unsaturated when possible alkyl, or  $C_7$ - $C_{20}$  alkylaryl, optionally containing heteroatoms selected from F, O, N, S, P, Cl; and/or functional groups preferably selected from  $-SO_2F$ ,  $-CH=CH_2$ ,  $-CH_2CH=CH_2$  and  $NO_2$ ;

A = F,  $(R_{h2}O)-CF(R_{f4})-$ ,  $-C(O)F$ , wherein

- $R_{h2}$ , equal to or different from  $R_h$ , has the  $R_h$  meanings;
- $R_{f4}$ , equal to or different from  $R_{f1}$ , has the  $R_{f1}$  meanings;

wherein a mono- or bifunctional carbonyl compound of formula:



wherein B is F or  $-C(O)R_{f4}$ ,  $R_f$ ,  $R_{f1}$  and  $R_{f4}$  being as above,

is reacted with at least one equivalent of a fluoroformate of formula:



wherein  $[[\text{R} - \text{R}_h \text{ or } \text{R}_{h2}]]$   $\text{R} = \text{R}_h \text{ or } \text{R}_{h2}$  as above;

in the presence of an ion fluoride compound (catalyst) and of a dipolar aprotic organic compound, liquid and inert under the reaction conditions.

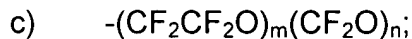
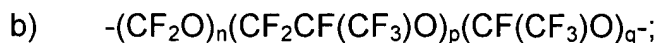
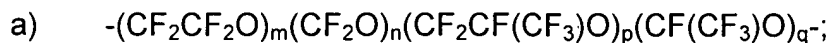
2. (Original) A process according to claim 1, wherein the  $(\text{C}_3\text{F}_6\text{O})$  unit of  $\text{R}_{f2}$  can be  $(\text{CF}_2\text{CF}(\text{CF}_3)\text{O})$  or  $(\text{CF}(\text{CF}_3)\text{CF}_2\text{O})$ .

3. (Previously Presented) A process according to claim 1, wherein in formula (I)  $\text{R}_{f1}$  and  $\text{R}_{f4}$  of A, independently the one from the other, are F,  $\text{CF}_3$ .

4. (Currently Amended) A process according to claim 1, wherein when  $\text{R}_f$  of formula (I) is a (per)fluoroalkylene,  $\text{R}_f$  is selected from the following groups:  
 $-\text{CF}_2-$ ,  $-\text{CF}_2\text{CF}_2-$ ,  $-\text{CF}_2\text{CF}_2\text{CF}_2-$ ,  $-\text{CF}_2(\text{CF}_3)\text{CF}-$ ; when  $\text{R}_f$  contains one oxygen atom it preferably is  $-\text{CF}_2(\text{OCF}_3)\text{CF}-$ .

5. (Currently Amended) A process according to claim 1, wherein  $\text{R}_{f2}$  is a perfluoropolyoxyalkylene chain having number average molecular weight from 66 to 12,000, ~~preferably from 100 to 5,000, more preferably from 300 to 2,000.~~

6. (Currently Amended) A process according to claim 5, wherein when  $\text{R}_{f2}$  is a perfluorooxyalkylene chain it is ~~preferably~~ selected from the following structures:



wherein:

m is comprised between 0 and 100 extremes included;

n is comprised between 0 and 50 extremes included;

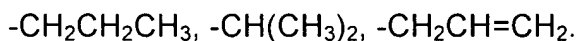
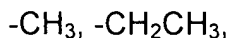
p is comprised between 0 and 100 extremes included;

q is comprised between 0 and 60 extremes included; and

~~m+n+p+q>0 and the number average molecular weight of  $R_{f2}$  being in the above limited.~~

7. (Original) A process according to claim 6, wherein  $R_{f2}$  is a perfluorooxyalkylene c), and the m/n ratio ranges from 0.1 to 10, n being different from zero and the number average molecular weight comprised within the above limits.

8. (Previously Presented) A process according to claim 1, wherein in formula (I)  $R_h$  and  $R_{h2}$  having the following meanings:



9. (Previously Presented) A process according to claim 1, wherein the ion fluoride compound is any compound capable to generate ion fluorides when, in the presence of dipolar aprotic solvents, at temperatures from 20 °C up to 200 °C, said dipolar aprotic

solvents being acetonitrile, dimethyl-formamide, glyme, ethylene polyoxides dimethylethers (PEO-dimethylethers).

10. (Currently Amended) A process according to claim 9, wherein the ion fluoride compound is selected from the group ~~comprising~~ consisting of metal fluorides ; ~~preferably alkaline or alkaline earth metal fluorides~~; AgF; alkylammoniumfluorides, alkylphosphonium-fluorides, wherein the nitrogen and respectively the phosphor atom can be substituted with one or more C<sub>1</sub>-C<sub>8</sub> alkyl groups, equal to or different from each other.

11. (Previously Presented) A process according to claim 9, wherein the ion fluoride compound is CsF and KF.

12. (Previously Presented) A process according to claim 9, wherein the catalyst is optionally supported.

13. (Previously Presented) A process according to claim 1, wherein the catalyst amounts, expressed in % moles, are in the range 0.1% - 50% with respect to the mono- or bifunctional carbonyl compound of formula (IV).

14. (New) A process according to claim 1, wherein the dipolar aprotic organic compound is selected from the group consisting of acetonitrile, dimethylformamide, glyme, ethylene polyoxides dimethylethers (PEO-dimethylethers).

15. (New) A process according to claim 1, wherein the ratio by weight between the dipolar aprotic organic compound and the ion fluoride compound ranges from 1:100 to 100:1.
16. (New) A process according to claim 1, wherein tertiary amines and/or phase transfer catalysts are used.
17. (New) A process according to claim 1, wherein the reaction temperature in the process is from 60 °C to 200 °C.
18. (New) A process according to claim 1, carried out in a discontinuous way.
19. (New) A process according to claim 1, carried out in a continuous way.
20. (New) A process according to claim 1, wherein  $R_f$  is a bivalent radical:  $C_2-C_{12}$ , linear or branched (per)fluoroalkylene, optionally containing one or more oxygen atoms.
21. (New) A process according to claim 1, wherein  $R_h$  is a  $C_1-C_{10}$  linear, branched when possible, saturated or unsaturated when possible alkyl, optionally containing heteroatoms selected from F, O, N, S, P, Cl; and/or functional groups preferably selected from  $-SO_2F$ ,  $-CH = CH_2$ ,  $-CH_2CH = CH_2$  and  $NO_2$ .

22. (New) A process according to claim 5, wherein  $R_{f2}$  is a perfluoropolyoxyalkylene chain having number average molecular weight from 100 to 5,000.
23. (New) A process according to claim 22, wherein  $R_{f2}$  is a perfluoropolyoxyalkylene chain having number average molecular weight from 300 to 2,000.
24. (New) A process according to claim 10, wherein the metal fluorides are alkaline or alkaline-earth metal fluorides.
25. (New) A process according to claim 14, wherein the dipolar aprotic organic compound is tetraglyme or PEO-dimethylethers having number average molecular weight in the range 134 - 2,000.
26. (New) A process according to claim 17, wherein the reaction temperature in the process is from 80 °C to 150 °C.